## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau





### (43) International Publication Date 19 August 2004 (19.08.2004)

PCT

# (10) International Publication Number WO 2004/069940 A3

(51) International Patent Classification<sup>7</sup>: C09D 161/02, 5/16

(21) International Application Number:

PCT/EP2004/001032

(22) International Filing Date: 4 February 2004 (04.02.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 03002539.9

5 February 2003 (05.02.2003) EF

(71) Applicant (for all designated States except US): CHEMI-CAL INVESTMENTS LTD.; 186 Main Street, Gibraltar (GI).

(72) Inventor; and

- (75) Inventor/Applicant (for US only): BLUM, Holger [DE/DE]; Poelchaukamp 23, 22301 Hamburg (DE).
- (74) Agent: KIRSCHNER, Klaus, D.; Schneiders & Behrendt, Sollner Strasse 38, 81479 München (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 16 September 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIFOULING COATING

(57) Abstract: This invention provides a high-build, self-polishing marine antifouling paint which affords a coated film having antifouling properties for a long period of time. The paint binder which is a fiber reinforced aldehyde resin comprises two synergisticially acting components, Component A and Component B. Component A an aluminium di-sec-alkoxide ace-toacetic ester chelate is represented by the following formula (I): (Rsub.1-O-)-Al-(CH3-CO-CH-CO-O-Rsub.2) wherein R.sup.1 represents an sec.-alkyl group having 3 to 10 carbon atoms, or a cycloalkyl group; and R.sub.2 represents an alkyl group having 1 to 10 carbon atoms, or a cycloalkyl group. Component B a monoalkoxy organo-titanate-IV is represented by the following formula (II): Rsub.3-O-Ti(-X)3 wherein Rsub.3 is a monovalent organic group having from 2 to 30 carbon atoms or a substituted derivative thereof; X in the above formulae independently represents an acylate group, a sulfonic acid residue, a phosphoric acid residue or a pyrophosphoric ester residue, or a mixture thereof.